Assessment of Surgeons' Attitudes Toward Intraoperative Coaching at The University of North Carolina at Chapel Hill

By

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A Master‟s Paper submitted to the faculty at
the University of North Carolina at Chapel Hill
in partial fulfillment of the requirements for
the degree of Master of Public Health in
the Public Health Leadership Program

Chapel Hill

Fall 2015

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Richard Feins, MD

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Anthony Viera, MD

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Date

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Assessment of Surgeons' Attitudes Toward Intraoperative Coaching at The University of North Carolina at Chapel Hill

Abstract

Purpose: Studying the feasibility of improving surgeon performance using an intraoperative coaching model at the University of North Carolina at Chapel Hill (UNC).

Methods: This is an observational study where barriers to acceptance and participation have been evaluated through an electronic questionnaire offered to senior faculty surgeons operating at UNC.

Results: A total of 83 senior faculty surgeons responded. The highest number for a question response was 83 and the lowest number for a question response was 73. There was a statistically significantly level of enthusiasm for the use of intraoperative coaching, 44 surgeons (53%) found it to be worthwhile and 23 (28%) found it to be very worthwhile. The highest preference for a coaching modality was live with a total of 41 surgeons (56%).

Conclusions: Faculty members at UNC are generally in favor of the concept of intraopertaive coaching. An effective intraoperative coaching methodology will therefore be developed where selected surgeons will be observed in the operating room by experts to evaluate their surgical technique, teaching effectiveness, and team leadership and management leading to quality improvement. This will lead to a pilot program for selected surgeons to produce reliable metrics of improved outcomes.

Introduction:

Hospitals and more specifically operating rooms (OR), are like any other organization and work environments that continuously demand improvement. In the OR, we can observe the crew, led by the surgeon, working together to accomplish the goals of the procedure. This collaborative process that is observed includes many activities in the form of skills, teaching, communication, and teamwork. The surgeon in the OR is expected to be able to perform and orchestrate this process in order to overcome the challenges he/she is facing with their crew.

The question which arises here is whether there is an opportunity for more learning, development and improvement at this level? Surgeons, similar to many other professions, reach a plateau in their performance during their career where at some point it starts to decrease and becomes self-evident (Guawande, 2011). In other industries (e.g. music and sports), coaches are found to continuously teach, observe, and evaluate in order to maintain and improve an individual or team performance (Guawande, 2011).

Whether through live in-person or video-recording, this principal of providing coaching to surgeons in the OR, could change the post graduate training concept by creating an evolving professional rather than an end product (Hu, 2012). A structured approach to life long learning in the operating room this could ultimately be a key factor for future surgical education and training. (Alken, 2015). The first step in this process requires an assessment of the attitudes that attending surgeons have toward ongoing intraoperative training after completion of residency.

Methods:

We conducted a literature search in PubMed/MEDLINE, first in March 2015 and then again in September 2015 with no change in the results. The terms and key words used in the search strategy were (intraoperative OR team) (coaching) (surgery OR surgical) (live OR video) NOT (simulation). Using these search terms, three articles matching the search criteria were found in the PubMed/MEDLINE database. Other resources were explored in the grey literature (Web Resource, TV & Magazine); three articles matching our search were found in Medscape, CNN and The New Yorker.

In order to conduct the assessment, questions of interest were formed and a survey instrument was designed with the use of Qualtrics through the Odum Institute at The University of North Carolina at Chapel Hill. Various elements were contained in the assessment questionnaire including: basic demographics (gender, official administrative division, faculty ranking), years of experience post-fellowship working as a surgeon, years of experience working in academia, level of enthusiasm for the use of intraoperative coaching, preference of coaching modality, have they provided any coaching post-fellowship to other attending, have they received any coaching post-fellowship from other attending, average length of surgery, and have they previously participated in collegiate competitions and activities e.g. sports, music, performance, debate. (Appendix-1)

The electronic assessment questionnaire was discussed and approved by the Committee of Perioperative Leaders (CoPL) at UNC hospitals in Chapel Hill. Application was then submitted to the Institutional Review Board (IRB) and Office of Human Research Ethics at UNC for approval. Which determined it to be exempt from further review according to under policy 45 CFR 46.101(b). Exemption Category: 2.Survey, interview, public observation. (Appendix-2).

An electronic link with access to the questionnaire was provided to the chairmen of nine surgical departments at UNC Hospital in Chapel Hill, and was distributed by them via email to only their senior faculty attending in their respective departments. Junior faculty (residents & fellows) were excluded. The nine departments that took part in the survey were: Surgery, Obstetrics & Gynecology, Orthopedics, Urology, Ophthalmology, Neurosurgery, Adult Dental, Otolaryngology/Head and Neck, and Oral & Maxillofacial. Under the department of Surgery, nine divisions were included: Abdominal Transplant, Burn Center, Gastrointestinal, General and Acute Care, Pediatric, Plastic and Reconstructive, Oncology, and Vascular. A reminder was sent a week after administrating the link by their chairmen and was closed 20 days later from the initial start day.

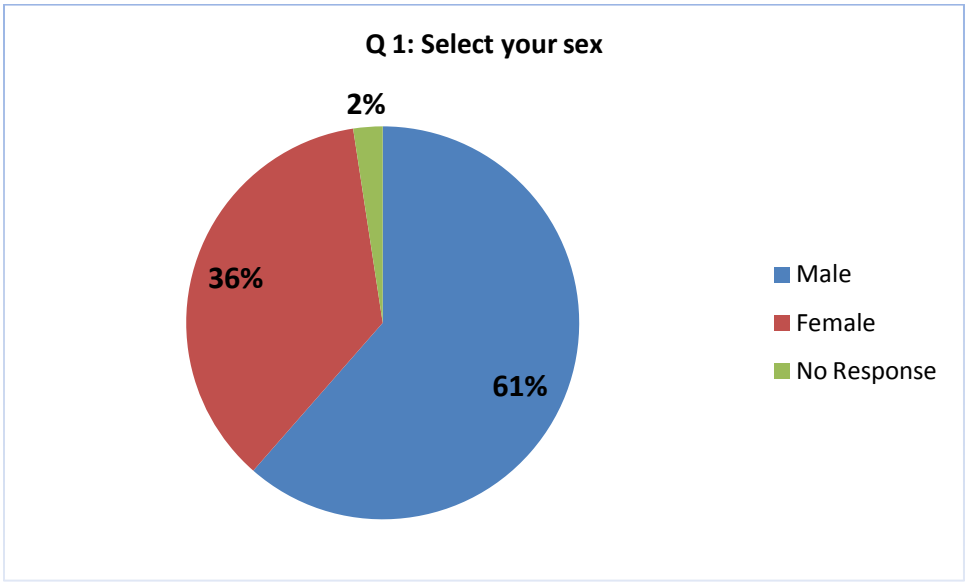
The estimated size of senior attending population was more than 100, with 50 participants being considered acceptable response and greater than 75 participants considered an excellent response. The survey results were described through descriptive statistics (number and percentage) by survey question using Excel to also generate figures.

Results:

A total of 83 senior faculty surgeons responded. The highest number for a question response occurred was 83 and the lowest number for a question response occurred was 73.

Question number one: a total of 81 from 83 answered for sex selection; 51 (61%) are male, 30 (36%) are female, and 2 did not respond.

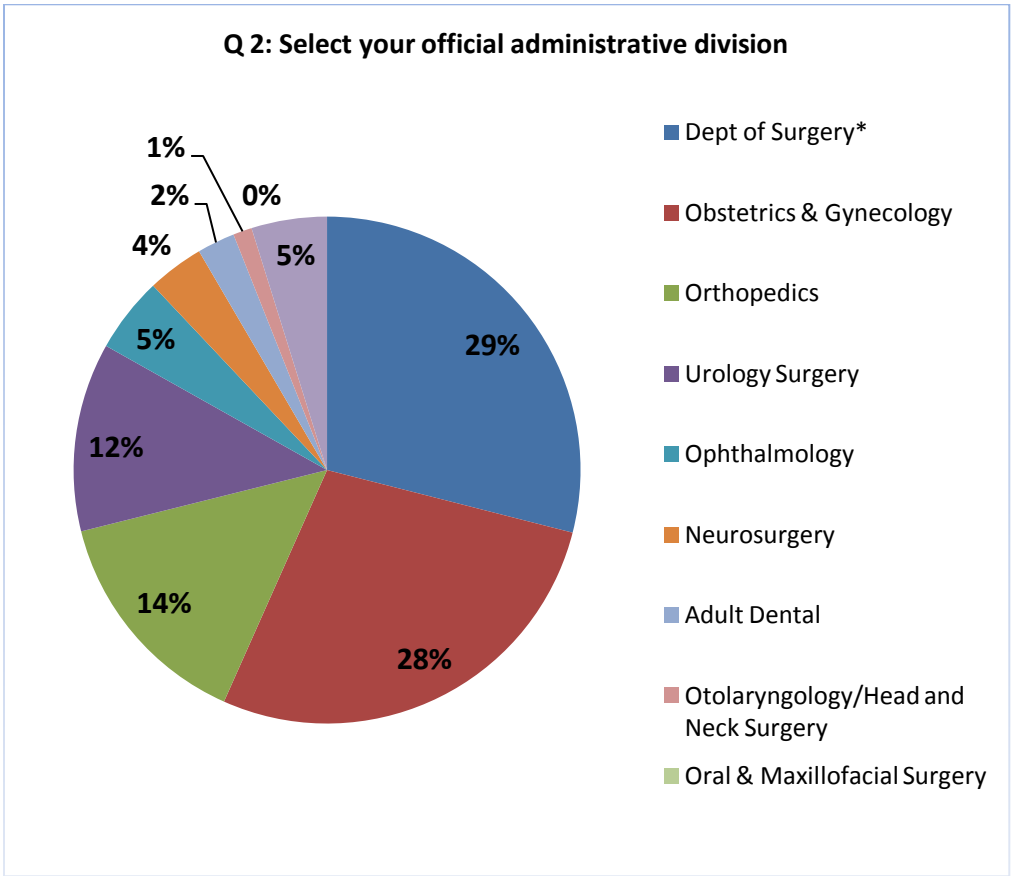
Figure 1. Demographics of Respondents by Sex.



Question number two: a total of 83 answered for selecting official administrative division, 24 (29%) from Surgery, 23 (28%) from Obstetrics & Gynecology, 12 (14%) from Orthopedics, 10 (12%) from Urology, 4 (5%) from Ophthalmology, 3 (4%) from Neurosurgery, 2 (2%) from Adult Dental, and 1 (1%) from Otolaryngology/Head and Neck Surgery. No answers came from Oral & Maxillofacial Surgery. The 24 answers for the Department of Surgery came from 9 sub- divisions as follow: 5 (6%) from

Cardiothoracic, 4 (5%) from General & Acute Care, 4 (5%) from Pediatric, 4 (5%) from Gastrointestinal, 3 (4%) from Plastic & Reconstructive, 2 (2%) from Vascular, 1 (1%) from Abdominal Transplant, 1 (1%) from Oncology, and no answers came from Burn Center.

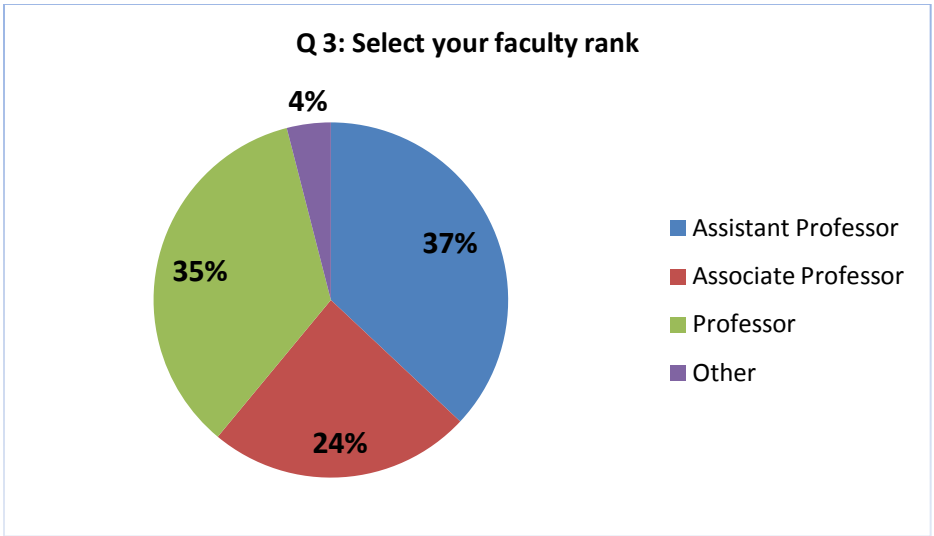
Figure 2. Demographics of Respondents by Administrative Division.



* Nine divisions included in the Dept of Surgery.

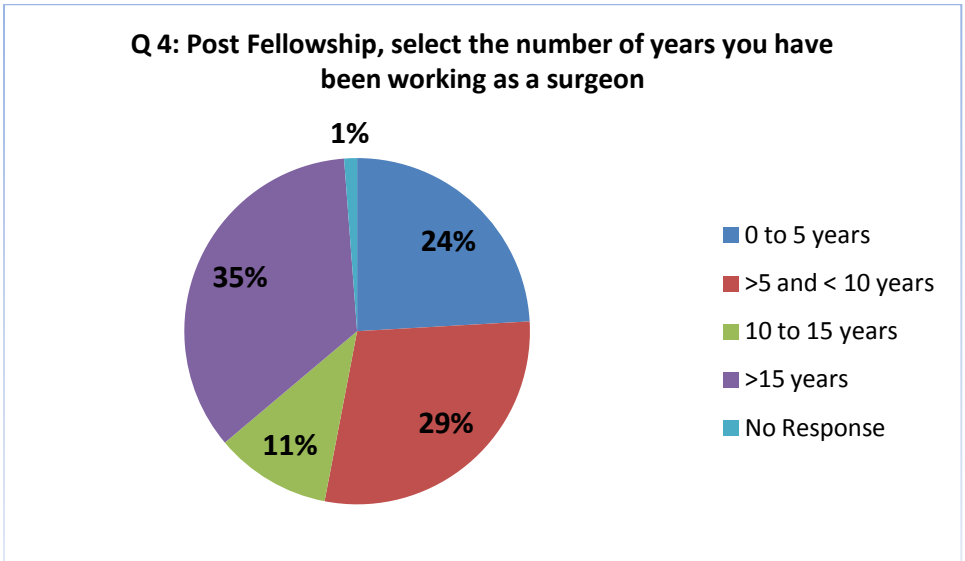
Question number three: a total of 83 selected for faculty rank, 31 (37%) for assistant professor, 29 (35%) for professor, 20 (24%) for associate professor, and 3 (4%) selected other (one distinguished professor, one clinical instructor, and one did not specify).

Figure 3. Demographics of Respondents by Faculty Rank.



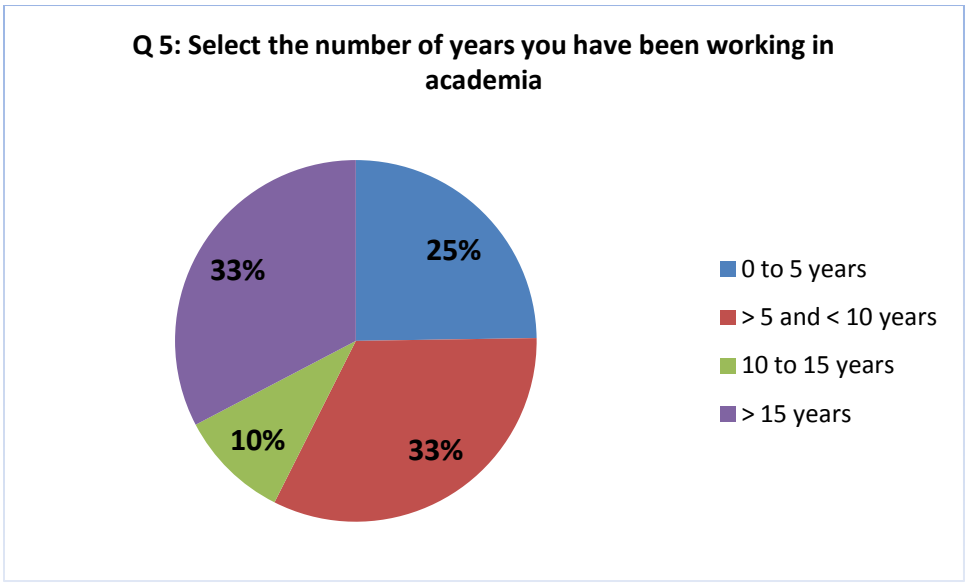
Question number four: a total of 82 from 83 answered the number of years they have been working as a surgeon post fellowship, 29 (35%) more than 15 years, 24 (29%) more than 5 and less than 10 years, 20 (24%) from 0 to 5 years, 9 (11%) from 10 to 15 years, and 1 (1%) did not respond.

Figure 4. Respondents by Surgical Experience.



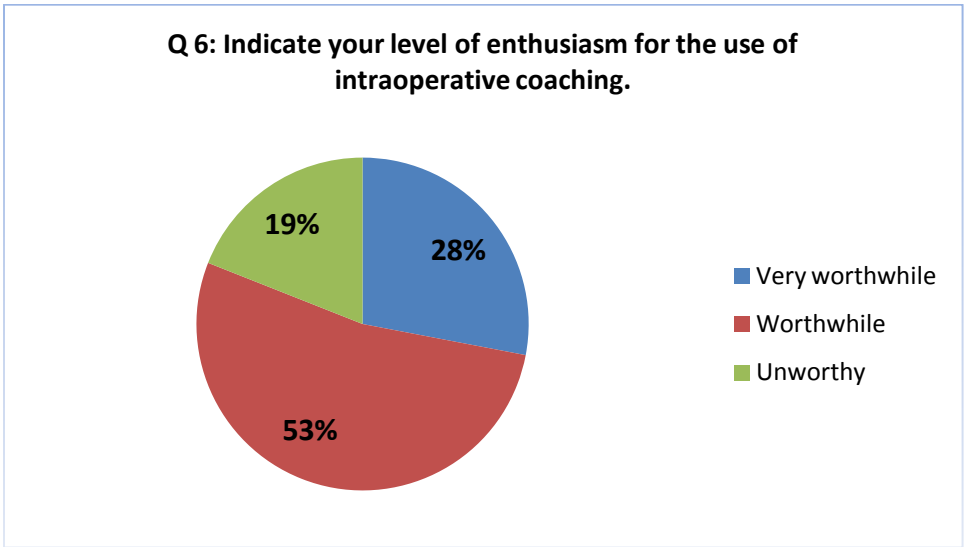
Question number five: a total of 83 answered the number of years they have been working in academia, 27 (33%) more than 15 years, 27 (33%) more than 5 and less than 10 years, 21 (25%) from 0 to 5 years, and 8 (10%) from 10 to 15 years.

Figure 5. Respondents by Academic Experience.



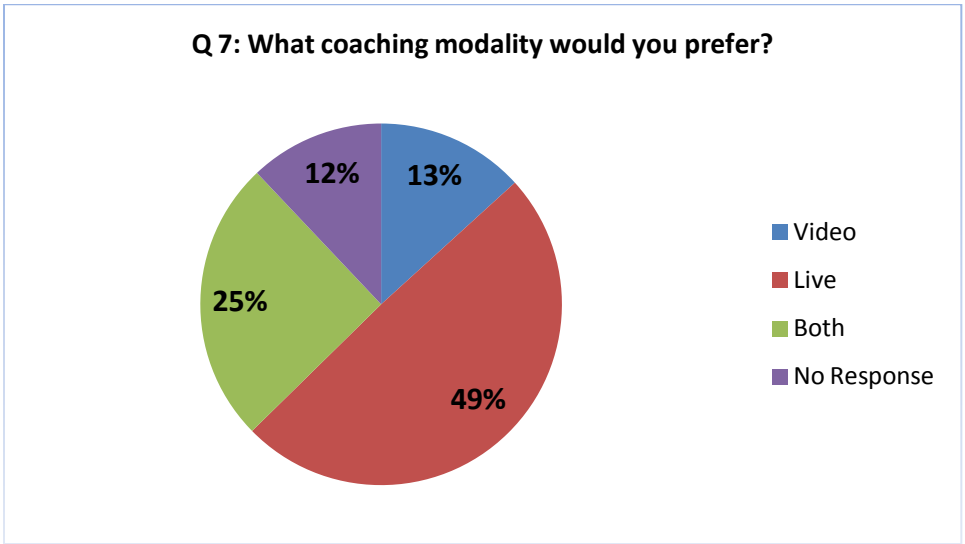
Question number six: a total of 83 answered for their level of enthusiasm for the use of intraoperative coaching, 44 (53%) thought it to be worthwhile, 23 (28%) thought it to be very worthwhile. Only 16 (19%) found it to be unworthy.

Figure 6. Surgeons' Support of Intraoperative Coaching.



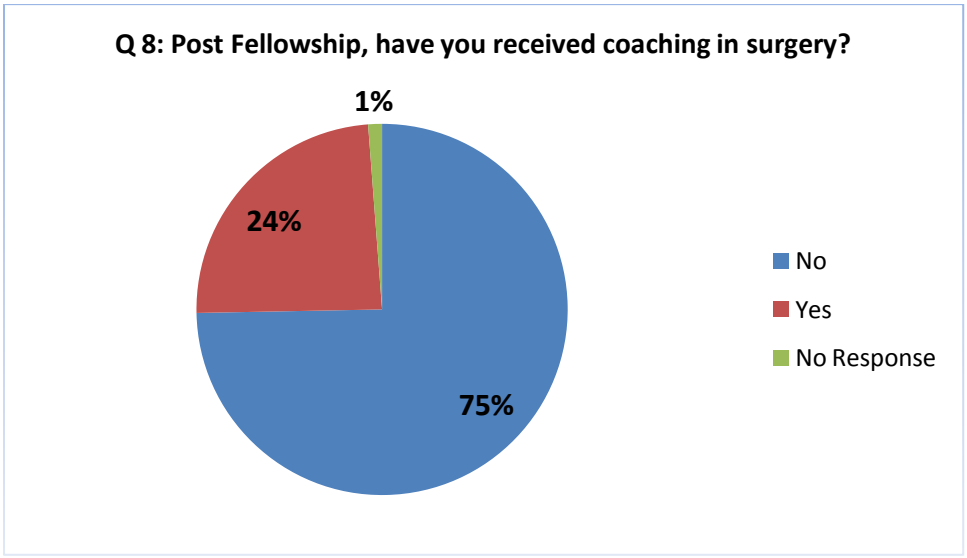
Question number seven: a total of 73 from 83 answered for their preferred coaching modality, 41 (49%) selected live coaching, 21 (25%) selected both types of coaching, 11 (13%) selected video coaching, and 10 did not respond.

Figure 7. Surgeons' Preference of Coaching Modality.



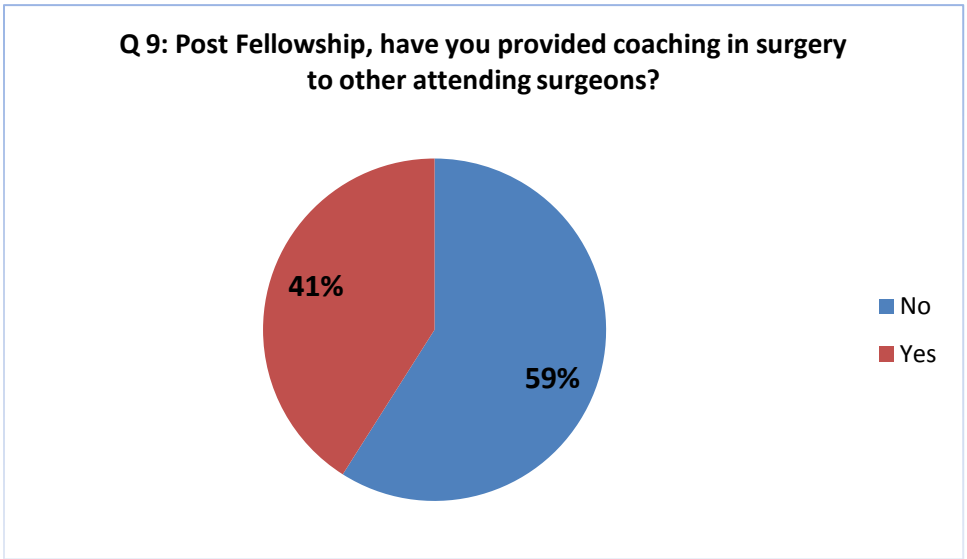
Question number eight: a total of 82 from 83 answered whether they had received coaching in surgery post fellowship, 62 (75%) said no, 20 (24%) said yes, and 1 did not respond.

Figure 8. Surgeons' Experience Receiving Surgical Coaching.



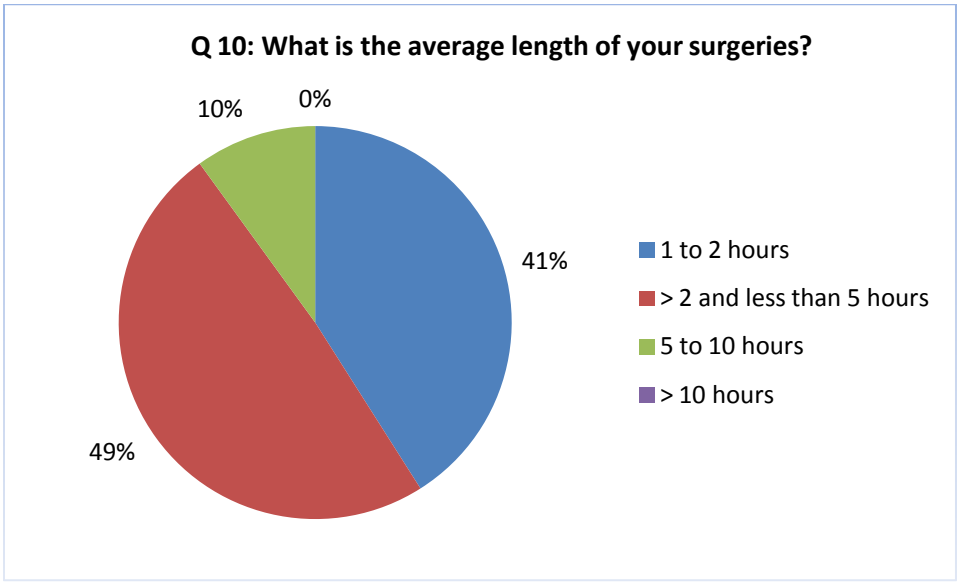
Question number nine: a total of 83 answered if they had provided coaching in surgery to other attending surgeons post fellowship, 49 (59%) said no, and 34 (41%) said yes.

Figure 9. Surgeons' Experience Providing Surgical Coaching.



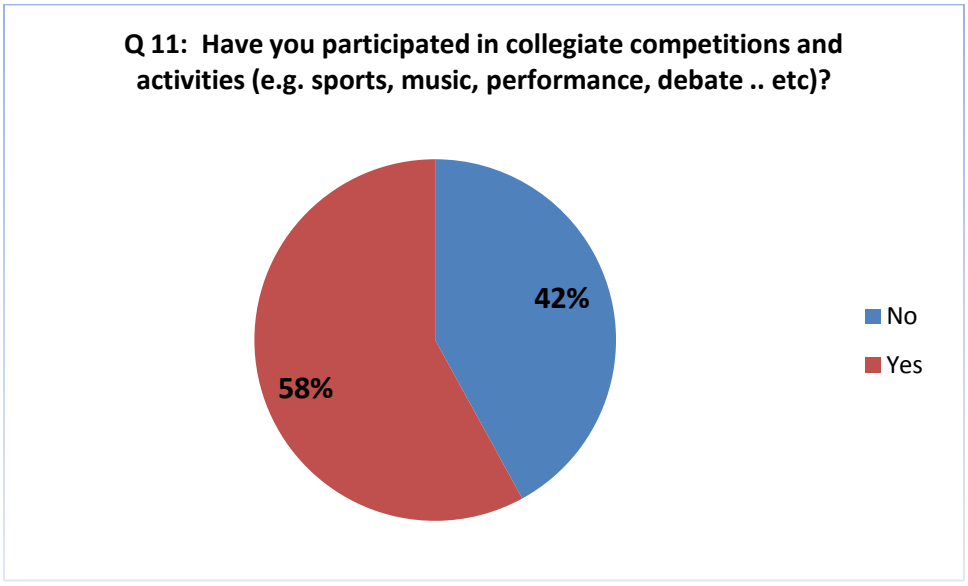
Question number ten: a total of 83 answered the average length of their surgeries, 41 (49%) more than 2 and less than 5 hours, 34 (41%) one to two hours, 8 (10%) from 5 to ten hours, and non selected more than 10 hours.

Figure 10. Respondents Average Length of Surgery: An Indicator for Coaching.



Question number eleven: a total of 83 answered if they had participated in collegiate competition and activities (e.g. sports, music, performance and debate.. etc), 48 (58%) answered yes and 35 (42%) answered no.

Figure 11. Respondents Other Collegiate Coaching Experience.



Subgroup Question 6 "Very Worthwhile" Analysis:

We decided to review the subgroup respondents based on the answer "very worthwhile", question number six, in relation to the other questions and formed a full statistical report (Appendix-3). We found 10 (43%) were female which was one third of the total 30 female respondents, while 13 (57%) were male which was a quarter of the total 51 male respondents. The majority were from the department of Surgery 8 (35%) and Obstetrics & Gynecology 7 (30%). Based on faculty rank, eleven (48%) were at the level of assistance professor. When it comes to the number of years of surgical experience, we found 8 (35%) had 0 to five years, and also 8 (35%) had more than 5 and less than 10 years experience. For the number of years experience in academia, eleven (48%) had more than 5 and less than 10 years experience. When looking at the preference type for coaching, thirteen (57%) selected live as their preference of choice. We also found that 17 (74%) did not receive any coaching, and 14 (61%) did not provide it to other attending surgeons. Finally, fourteen (61%) had past coaching experience in collegiate level sports and activities.

Discussion:

Although to our knowledge, no previous studies were found to assess the concept of live intraoperative coaching, where a surgeon is observed and critiqued by another surgical expert in the field for the purpose of working together to improve intraoperative performance, this attitude questionnaire was able to provide us with the necessary information that is needed to proceed for further phases in our research. The level of enthusiasm, background and expertise, previous participation in coaching whether during their professional or college years are all positive indicators for launching a multi-phase pilot program with the intention of further expanding it abroad.

Pilot Program & Global Application:

We will establish a platform by which selected surgeons will be observed in the operating room by experts to evaluate their surgical technique, teaching effectiveness, and crew resource management. The purposed first phase for this live coaching program will involve pairing three experienced surgical professionals as coaches one on one with three chairmen from different specialties. It is felt that having chairmen participate in the initial phase of the trial will lead to greater acceptability of the training by other members of their departments and assist the program in adapting to the environment and culture of ongoing improvement in the workplace. It will also show organizational commitment to concept.

Three separate dates will be assigned for three pilot coaching sessions in the hospital. The coach will observe the surgeon throughout the selected procedure in the OR. After the operation is complete, the coach will sit with the surgeon in order to provide feedback

that was observed in regards to all aspects of the procedure; quality of the surgery, efficiency of the surgery, communication and crew resource management during the procedure, and teaching. The surgeon will also be provided the opportunity to respond to these inputs. These two settings will occur during a limited time frame. The process of exchanging feedback between both, the surgeon and the coach, will be observed and evaluated by a third person, external evaluator, who is an expert in communication and continuous quality improvement. When the coaching session is over, both the coach and surgeon will be provided with the same electronic questionnaire that would include evaluation of each other's performance, and their own self assessment. This type of assessment will enable us to engage both the coach and the surgeon in the rating process, and provide us with a broader perspective by comparing the differences in perception throughout the session. On the other hand, the external evaluator will be provided a separate questionnaire to evaluate both feedback processes of the participants.

Further expansion of the program to potentially widespread use in the institution and elsewhere will require proceeding to other phases and developing an outcome measures. The next purposed phase for video based recording coaching in the OR, will provide more convenience and mitigate any deficiencies associated with the live method (Hu, 2012). Our aim is to utilize each of these program strategies for contemporary training that could lead to well balanced results (Łaski, 2013).

The live in-person coach will provide us with the flexibility between levels of observing to engagement, which we can expect to produce immediate results. The coach will always have the ability of free movement and improved view in the OR for more depth in presence and assurance. Contrarily, the ability of being physically present at

different locations would require hefty investments in travelling and time, even with facing the obstacle of being present on time to carry out last minute sessions. Also, the surgical coach is expected to assess without interruption; the surgeons' surgical technique and approach, quality of teaching provided to the fellows, residents and students, and leading and communicating with the rest of the team throughout the operation. This is where we expect video based coaching to complement the next phase of this educational and training method.

Video based recording could produce improvement in quality and learning (Haelle, 2015). We can see from our own personal use of videos, how it provides a versatile method of learning especially with the ability of controlling the timeline of review at the convenience of both the coach and the surgeon. This transportable value enables the coach to provide his expertise anywhere in the world. We can expect video based coaching to be a potent visual educational tool for a predominantly visual learning field in the form of surgery. Although, this technique is lacking for the immediate effect and intervention, the crucial drawback comes mainly in the cost, equipments and privacy issues (Haelle, 2015).

To prevent mistakes in the OR, researchers utilized video recordings with other variables, like data about the patient and team, to analyze the procedure by a surgical black box (Sathya, 2014). The intended use of this device is to have a system that would analyze data in similar fashion to airplanes devices. This method of electronic monitoring could provide us with valuable information in the case of adverse situations in the OR and identifying its causes (Sathya, 2014). The concept for this technology still lacks

components, where computers replace human experts to carry out the monitoring that is important to comprehend all the necessary information during an OR procedure.

Some of the concerns we have that may emerge and needs to be addressed are due to the nature of coaching and affect on the surgical participant. For example, will this change in the surgeons' practical environment lead them to become more dependent on their surrounding, either from the in-person coaching or video recording, for their training and improvement? How much affect will it have on the surgeons own ability and self-confidence? Those concerns will be assessed and the coach has to be experienced enough to be able to identify these issues, and prevent any damage this may cause to the surgeons own ability.

This coaching modality we are initiating seems in theory to be more applicable in well developed areas, but with the advanced telecommunications we have today, less developed ones will still stand a better chance. We believe this program can be beneficial in regions where surgical providers lack resources. For instance, if there is a shortage of surgeons in an area where each practitioner is required to perform surgery for multiple specialties, the coaching program will probably augment the skills and performance to ensure decreasing the gap of the surgical care provided. This can also be applied to other members of the healthcare team to learn and perform basic surgical procedures to further develop the limited workforce and increase task shifting. Although, many factors like facilities and infrastructure would play a role in the quality of services provided, the main focus of this technology will be on teaching skills to the surgeons, nurses and community health workers to expand their roles and peer coaching in order to help sustain the work force development.

Overall, we suggest evaluating the impact of the coaching program over an extended period of time for certain outcome measures with a larger number of participants. We also need to acquire a baseline for the measures we identify in our hospital. This will allow us to initiate comparisons and enable the recognition of areas that require more intervention and development. These measures include clinical and personal outcomes in our assessment for quality improvement. Clinical outcomes that could be assessed includes: cost-effectiveness, recovery and discharge time, complication and readmission rates, number of follow-ups, duration of operations, and mortality. For personal outcomes, we expect to monitor the surgeons' improvements in the approach and technique, self confidence, time and resource management, communication, teaching, and team effectiveness. By the use of this program, hospitals will ultimately benefit from measuring these outcomes, and demonstrate to their faculties' commitment toward their personal and professional development.

Conclusion:

Faculty members at the University of North Carolina at Chapel Hill are generally in favor of the concept of intraopertaive coaching. An effective intraoperative coaching methodology will therefore be developed where selected surgeons will be observed in the operating room by experts to evaluate their surgical technique, teaching effectiveness, and team leadership and management leading to quality improvement. This will lead to a pilot program for selected surgeons to produce reliable metrics of improved outcomes.

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Appendix 1.

Electronic Questionnaire:

Surgeon's Attitudes Toward Intraoperative Coaching - UNC-CH

-Thank you for participating in this short survey to collect surgeon's attitudes towards intraoperative coaching. -This survey will take 2 minutes to complete and has been approved by the Committee of Perioperative Leaders (CoPL) at UNC-Chapel Hill.-Intraoperative coaching is where a surgeon is observed and critiqued by another surgical expert in the field for the purpose of working together to improve intra-operative performance. -No personally identifying information will be collected.-We appreciate your honest responses to each of the following questions. -If you have any questions or concerns about this survey please contact Dr. Omar Alhudaib (Omar_alhudaib@med.unc.edu) or Dr. Richard Feins (Richard_Feins@med.unc.edu). Thank you.

Q1 1- Select your sex:

- ❍ Male
- ❍ Female

Q2 2- Select your official administrative division:

- ❍ General and Acute Care Surgery
- ❍ Abdominal Transplant Surgery
- ❍ Burn Center
- ❍ Cardiothoracic Surgery
- ❍ Gastrointestinal Surgery
- ❍ Pediatric Surgery
- ❍ Plastic and Reconstructive Surgery
- ❍ Surgical Oncology
- ❍ Vascular Surgery
- ❍ Urology Surgery
- ❍ Otolaryngology/Head and Neck Surgery
- ❍ Obstetrics & Gynecology
- ❍ Oral & Maxillofacial Surgery
- ❍ Neurosurgery
- ❍ Orthopedics
- ❍ Ophthalmology
- ❍ Adult Dental

Q3 3- Select your faculty rank:

- ❍ Assistant Professor
- ❍ Associate Professor
- ❍ Professor
- ❍ Other (please specify) _____

Q4 4- Post Fellowship, select the number of years you have been working as a surgeon:

- ❑ 0 to 5 years
- ❑ >5 and less than 10 years
- ❑ 10 to 15 years
- ❑ >15 years

Q5 5- Select the number of years you have been working in academia:

- ❍ 0 to 5 years
- ❍ > 5 and less than 10 years
- ❍ 10 to 15 years
- ❍ > 15 years

Q6 6- Indicate your level of enthusiasm for the use of intraoperative coaching.

- ❍ Very worthwhile
- ❍ Worthwhile
- ❍ Unworthy

Q7 7- What coaching modality would you prefer?

- ❍ Video
- ❍ Live
- ❍ Both

Q8 8- Post Fellowship, have you received coaching in surgery?

- ❍ No
- ❍ Yes

Q9 9- Post Fellowship, have you provided coaching in surgery to other attending surgeons?

- ❍ No
- ❍ Yes

Q10 10- What is the average length of your surgeries?

- ❍ 1 to 2 hours
- ❍ > 2 and less than 5 hours
- ❍ 5 to 10 hours
- ❍ > 10 hours

Q11 11- Have you participated in collegiate competitions and activities (e.g. sports, music, performance, debate .. etc)?

- ❍ No
- ❍ Yes

Thank you very much for providing your responses - please click >> NEXT below to submit.

Appendix 2.

IRB Exemption:

To: Omar Alhudaib
Public Health Leadership

From: Office of Human Research Ethics

Date: 7/27/2015
RE: Notice of IRB Exemption
Exemption Category: 2.Survey, interview, public observation
Study #: 15-1886

Study Title: Assessment of Surgeon's Attitudes Toward Intraoperative Coaching at The University of North Carolina at Chapel Hill.

This submission has been reviewed by the Office of Human Research Ethics and was determined to be exempt from further review according to the regulatory category cited above under 45 CFR 46.101(b).

Study Description:

Purpose: Studying the feasibility of improving surgeon performance using an intraoperative coaching model at the University of North Carolina at Chapel Hill.

Participants: Senior faculty surgeons operating at the University of North Carolina at Chapel Hill.

Procedures (methods): This is an observational study where barriers to acceptance and participation will be evaluated through an electronic questionnaire.

Investigator's Responsibilities:

If your study protocol changes in such a way that exempt status would no longer apply, you should contact the above IRB before making the changes. There is no need to inform the IRB about changes in study personnel. However, be aware that you are responsible for ensuring that all members of the research team who interact with subjects or their identifiable data complete the required human subjects training, typically completing the relevant CITI modules.

The IRB will maintain records for this study for 3 years, at which time you will be contacted about the status of the study.

The current data security level determination is Level I. Any changes in the data security level need to be discussed with the relevant IT official. If data security level II and III, consult with your IT official to develop a data security plan. Data security is ultimately the responsibility of the Principal Investigator.

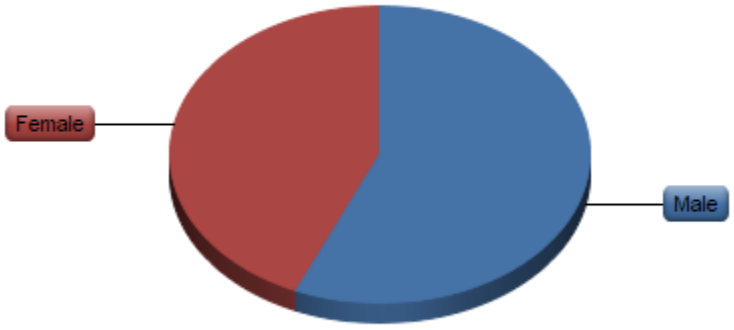
Please be aware that approval may still be required from other relevant authorities or "gatekeepers" (e.g., school principals, facility directors, custodians of records), even though the project has determined to be exempt. .

CC:
Anthony Viera, Public Health LeadershipIRB Informational Message - please do not use email REPLY to this address

Appendix 3.

Subgroup on Question 6 "VERY WORTHWHILE" Report:

1. 1- Select your sex:



#	Answer		Response	%
1	Male		13	57%
2	Female		10	43%
	Total		23	100%

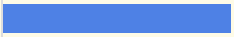
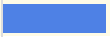
Statistic	Value
Min Value	1
Max Value	2
Mean	1.43
Variance	0.26
Standard Deviation	0.51
Total Responses	23

2. 2- Select your official administrative division:

#	Answer		Response	%
12	Obstetrics & Gynecology		7	30%
10	Urology Surgery		3	13%
1	General and Acute Care Surgery		2	9%
14	Neurosurgery		2	9%
15	Orthopedics		2	9%
6	Pediatric Surgery		2	9%
4	Cardiothoracic Surgery		2	9%
16	Ophthalmology		1	4%
5	Gastrointestinal Surgery		1	4%
8	Surgical Oncology		1	4%
17	Adult Dental		0	0%
13	Oral & Maxillofacial Surgery		0	0%
9	Vascular Surgery		0	0%
2	Abdominal Transplant Surgery		0	0%
3	Burn Center		0	0%
7	Plastic and Reconstructive Surgery		0	0%
11	Otolaryngology/Head and Neck Surgery		0	0%
	Total		23	100%

Statistic	Value
Min Value	1
Max Value	16
Mean	9.70
Variance	19.95
Standard Deviation	4.47
Total Responses	23

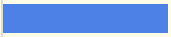
3. 3- Select your faculty rank:

#	Answer		Response	%
1	Assistant Professor		11	48%
2	Associate Professor		6	26%
3	Professor		5	22%
4	Other (please specify)		1	4%
	Total		23	100%

Other (please specify)
Clinical instructor

Statistic	Value
Min Value	1
Max Value	4
Mean	1.83
Variance	0.88
Standard Deviation	0.94
Total Responses	23

4. 4- Post Fellowship, select the number of years you have been working as a surgeon:

#	Answer		Response	%
1	0 to 5 years		8	35%
2	>5 and less than 10 years		8	35%
3	10 to 15 years		1	4%
4	>15 years		6	26%

Statistic	Value
Min Value	1
Max Value	4
Total Responses	23

5. 5- Select the number of years you have been working in academia:

#	Answer		Response	%
1	0 to 5 years		7	30%
2	> 5 and less than 10 years		11	48%
3	10 to 15 years		1	4%
4	> 15 years		4	17%
	Total		23	100%

Statistic	Value
Min Value	1
Max Value	4
Mean	2.09
Variance	1.08
Standard Deviation	1.04
Total Responses	23

6. 6- Indicate your level of enthusiasm for the use of intraoperative coaching.

#	Answer		Response	%
1	Very worthwhile		23	100%
2	Worthwhile		0	0%
3	Unworthy		0	0%
	Total		23	100%

Statistic	Value
Min Value	1
Max Value	1
Mean	1.00
Variance	0.00
Standard Deviation	0.00
Total Responses	23

7. 7- What coaching modality would you prefer?

#	Answer		Response	%
1	Video		2	9%
2	Live		13	57%
3	Both		8	35%
	Total		23	100%

Statistic	Value
Min Value	1
Max Value	3
Mean	2.26
Variance	0.38
Standard Deviation	0.62
Total Responses	23

8. 8- Post Fellowship, have you received coaching in surgery?

#	Answer		Response	%
1	No		17	74%
2	Yes		6	26%
	Total		23	100%

Statistic	Value
Min Value	1
Max Value	2
Mean	1.26
Variance	0.20
Standard Deviation	0.45
Total Responses	23

9. 9- Post Fellowship, have you provided coaching in surgery to other attending surgeons?

#	Answer		Response	%
1	No		14	61%
2	Yes		9	39%
	Total		23	100%

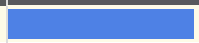
Statistic	Value
Min Value	1
Max Value	2
Mean	1.39
Variance	0.25
Standard Deviation	0.50
Total Responses	23

10. 10- What is the average length of your surgeries?

#	Answer		Response	%
1	1 to 2 hours		11	48%
2	> 2 and less than 5 hours		8	35%
3	5 to 10 hours		4	17%
4	> 10 hours		0	0%
	Total		23	100%

Statistic	Value
Min Value	1
Max Value	3
Mean	1.70
Variance	0.58
Standard Deviation	0.76
Total Responses	23

11. 11- Have you participated in collegiate competitions and activities (e.g. sports, music, performance, debate .. etc)?

#	Answer		Response	%
1	No		9	39%
2	Yes		14	61%
	Total		23	100%

Statistic	Value
Min Value	1
Max Value	2
Mean	1.61
Variance	0.25
Standard Deviation	0.50
Total Responses	23